



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**FORD F-150 V119**  
 Component  
**Transfer Case**  
 Fluid  
**ATF (--- GAL)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### WEAR

Metal levels are typical for a new component breaking in.

### CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of seal material.

### FLUID CONDITION

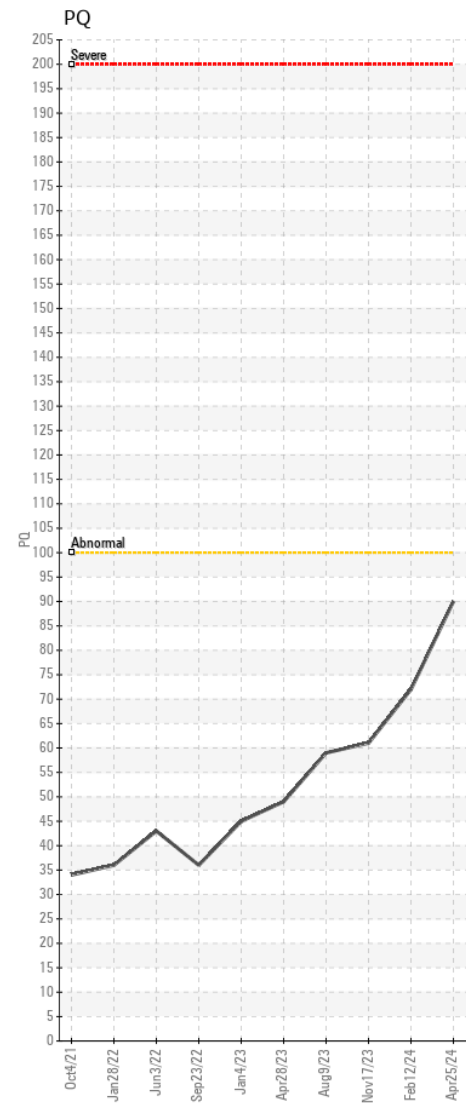
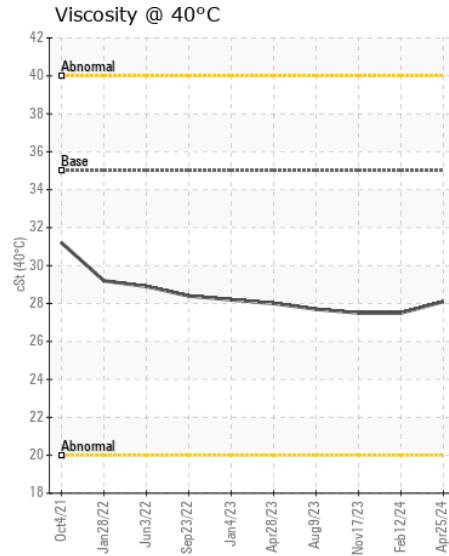
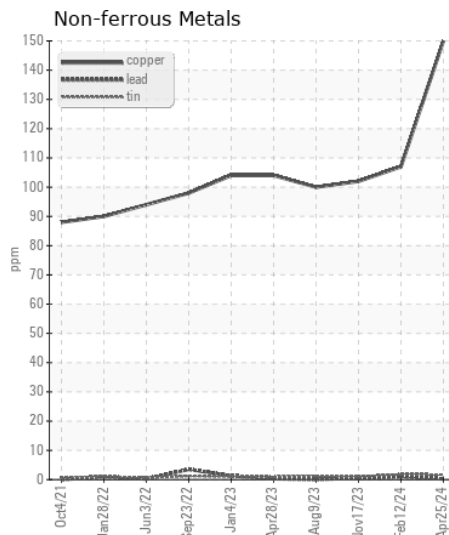
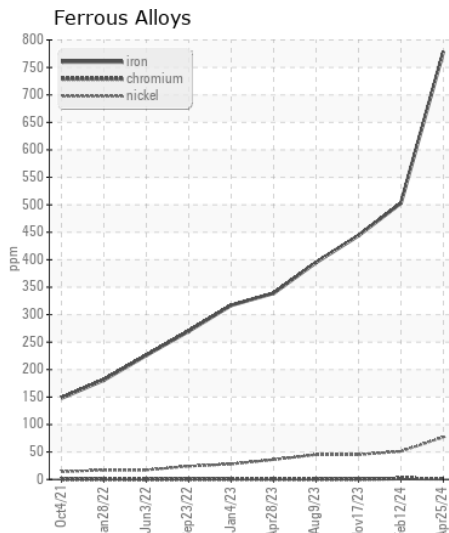
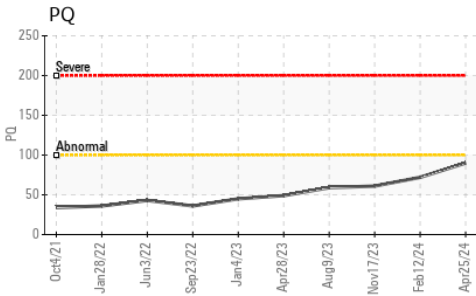
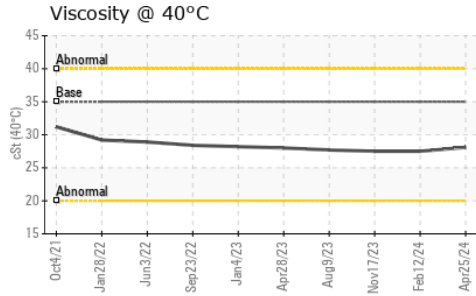
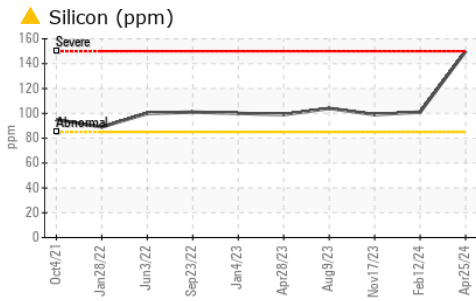
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0206145</b>	JR0189085	JR0178493
Sample Date		Client Info		<b>25 Apr 2024</b>	12 Feb 2024	17 Nov 2023
Machine Age	mls	Client Info		<b>84540</b>	78768	73005
Oil Age	mls	Client Info		<b>84540</b>	0	73005
Filter Age	mls	Client Info		<b>84540</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

PQ		ASTM D8184		<b>90</b>	72	61
Iron	ppm	ASTM D5185m	>500	<b>779</b>	503	444
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185m	>5	<b>77</b>	51	45
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>45	<b>59</b>	40	36
Lead	ppm	ASTM D5185m	>150	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>100	<b>150</b>	107	102
Tin	ppm	ASTM D5185m	>5	<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

Silicon	ppm	ASTM D5185m	>85	<b>▲ 150</b>	▲ 101	▲ 99
Potassium	ppm	ASTM D5185m	>20	<b>13</b>	10	7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

Sodium	ppm	ASTM D5185m		<b>24</b>	15	15
Boron	ppm	ASTM D5185m		<b>57</b>	34	33
Barium	ppm	ASTM D5185m		<b>14</b>	10	4
Molybdenum	ppm	ASTM D5185m		<b>2</b>	2	<1
Manganese	ppm	ASTM D5185m		<b>67</b>	49	45
Magnesium	ppm	ASTM D5185m		<b>158</b>	117	101
Calcium	ppm	ASTM D5185m		<b>264</b>	210	183
Phosphorus	ppm	ASTM D5185m		<b>220</b>	127	139
Zinc	ppm	ASTM D5185m		<b>25</b>	6	11
Sulfur	ppm	ASTM D5185m		<b>2830</b>	1383	1274
Visc @ 40°C	cSt	ASTM D445	35.0	<b>28.1</b>	27.5	27.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0206145 **Received** : 10 May 2024  
**Lab Number** : 06175756 **Tested** : 13 May 2024  
**Unique Number** : 11021809 **Diagnosed** : 14 May 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**MATTHEWS CONSTRUCTION**  
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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)